REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed September 14, 2007. Through this response, claims 1, 6, 11, 18 and 20 have been amended; and claims 2, 7, 12, 15, 19 and 22 have been canceled without prejudice, waiver, or disclaimer. Reconsideration and allowance of the application and pending claims 1, 3-6, 8-11, 13, 14, 16-18, 20, 21, and 23-24 are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claims 2, 7, 15 and 22 have been rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention

In response to the rejection, Applicants have canceled claims 2, 7, 15, and 22.

Accordingly, Applicants respectfully request that the rejections to these claims be withdrawn.

II. Claim Rejections - 35 U.S.C. § 103(a)

A. Statement of the Rejections

Claims 1-10 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over *Cromer* et al. ("*Cromer*," U.S. Pub. No. 2003/0156558) in view of *Rune* et al. ("*Rune*," U.S. Pub. No. 2006/0062187). Claims 11, 15-18, 22-24 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over *Frodigh* et al. ("Wireless ad hoc networking — The art of networking without a network," Ericsson Review No. 4, 2000) in view of *Chen*. ("*Chen*," U.S. Pub. No. 2003/0210700). Claims 12 and 19 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over *Frodigh* et al. in view of *Chen*, and further in view of *Rune*. Claims 13, 14, 20 and 21 have been rejected under 35 U.S.C. §103(a) as

Art Unit: 2616

allegedly unpatentable over Frodigh et al. in view of Chen, and in further view of Cromer.

Applicants respectfully traverse these rejections where not rendered moot by amendment.

B. Discussion of the Rejection

The U.S. Patent and Trademark Office ("USPTO") has the burden under section

103 to establish a prima facie case of obviousness according to the factual inquiries

expressed in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966). The four

factual inquires, also expressed in MPEP 2100-116, are as follows:

(A) Determining the scope and contents of the prior art;

(B) Ascertaining the differences between the prior art and the claims in issue;

(C) Resolving the level of ordinary skill in the pertinent art; and

(D) Evaluating evidence of secondary considerations.

Applicants respectfully submit that a *prima facie* case of obviousness is not established using the art of record. For at least the reasons set forth herein, Applicants

respectfully request that the rejections be withdrawn.

Rejection of claims 1-10 pertaining to Cromer and Rune.

Independent Claim 1

Amended Claim 1 recites (with emphasis added):

A method comprising:

receiving a first frame from a shared-communications channel wherein said first frame comprises:

- (i) a first basic service set identifier:
- (ii) a first internet protocol address:
- (iii) a second internet protocol address; and

(iv) a first frame body;

passing said first frame based on said first basic service set identifier; tagging said first frame body with a tag that represents said first basic service set identifier; and

transmitting a second frame into said shared-communications channel wherein said second frame comprises:

(i) a second basic service set identifier that is different from said first basic service set identifier:

- (ii) a third internet protocol address that is different from said first internet protocol address; and
- (iii) said second internet protocol address; and
- (iv) a second frame body wherein said second frame body comprises said first frame body and said tag.

Applicants respectfully submit that the rejection to claim 1 has been rendered moot through amendment. Applicants respectfully submit that independent claim 1, as amended, is allowable for at least the reason that *Cromer* fails to disclose, teach, or suggest at least the above-emphasized features of claim 1. Furthermore, Applicants respectfully submit that the addition of *Rune* fails to cure this deficiency.

On page 4 of the Office Action the Examiner asserts, "...Cromer et al do [sic] not specifically disclose tagging said first frame with a tag that represents said first basic service set identifier." The Office Action further alleges (page 4) (emphasis added):

In the same field of endeavor, Rune teaches adding a tag to a frame header based on basic service set identifier (MAC address) (paragraphs [0015]-[0022]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a tag to a frame as disclosed by Rune in the method and apparatus of Cromer et al in order to identify a particular frame or frames.

Applicants respectfully disagree. For instance, Rune (paragraph [0015]) teaches:

In order to determine what VLAN a frame belongs to a "tag header" is added to the regular Ethernet frame header. The tag header contains a VLAN identity in the form of a 12-bit VLAN tag. The VLAN tag is used by a switch in the LAN to determine through which port(s) a certain frame is to be forwarded.

Applicants respectfully submit that adding a "tag header" containing a VLAN identity to a "regular Ethernet frame header," as disclosed in *Rune*, is not the same as tagging said first frame body with a tag that represents said first basic service set identifier. Even if, *arguendo*, *Rune* did disclose adding a "tag" which represents first basic

Art Unit: 2616

service set identifier to a frame. Rune does not disclose tagging a first frame body and then transmitting a second frame body which comprises the first frame body and the tag. Rather,

Rune appears only to disclose adding a tag to a frame header.

For a proper rejection of the claim under 35 U.S.C. §103, the cited combination of references must disclose, teach or suggest all elements / features of the claim at issue, See, e.g., In re Dow Chemical, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and In re Keller, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 1, the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 1 is allowable for the reasons discussed above. Applicants respectfully submit that dependent claims 3-5 are allowable for the reason that each depends from an allowable claim. In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 3-5 be withdrawn.

Independent Claim 6

Amended Claim 6 recites (with emphasis added):

6. An apparatus comprising:

a receiver for receiving a first frame from a shared-communications. channel wherein said first frame comprises:

- (i) a first basic service set identifier:
- (ii) a first internet protocol address;
- (iii) a second internet protocol address; and
- (iv) a first frame body;
- a processor for:
- - (i) passing said first frame based on said first basic service set identifier; and
 - (ii) tagging said first frame body with a tag that is representative of said first basic service set identifier:
- a transmitter for transmitting a second frame into said sharedcommunications channel wherein said second frame comprises:

(i) a second basic service set identifier that is different from said first basic service set identifier:

(ii) a third internet protocol address that is different from said first internet protocol address; and

- (iii) said second internet protocol address; and
- (iv) a second frame body wherein said second frame body comprises said first frame body and said tag.

Applicants respectfully submit that the rejection to claim 6 has been rendered moot through amendment. Applicants respectfully submit that independent claim 6, as amended, is allowable for at least the reason that *Cromer* fails to disclose, teach, or suggest at least the above-emphasized features of claim 6. Furthermore, Applicants respectfully submit that the addition of *Rune* fails to cure this deficiency.

Further, with respect to Cromer and Rune, Applicants submit that the Office Action has failed to establish a prima facie case of obviousness since it has not been adequately established why one who is skilled in the art would have a technical reason to combine these references.

For a proper rejection of the claim under 35 U.S.C. §103, the cited combination of references must disclose, teach or suggest all elements / features of the claim at issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and In re Keller, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 6. the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 6 is allowable for the reasons discussed above, Applicants respectfully submit that dependent claims 8-10 are allowable as a matter of law. Therefore, Applicants respectfully request that the rejection of claims 7-10 be withdrawn.

Rejection of claims 11, 15-18, 22-24 pertaining to Frodigh et al. and Chen.

Independent Claim 11

Amended Claim 11 recites (with emphasis added):

A method comprising:

receiving a first frame from a shared-communications channel wherein said first frame comprises;

- (i) a first basic service set identifier;
- (ii) a first internet protocol address:

passing said first frame based on said first basic service set

passing said first frame based on said first basic service se identifier; and

(iii) a first frame body:

tagging said first frame body with a tag that is representative of said first basic service set identifier:

translating said first internet protocol address to a second internet protocol address; and

transmitting a second frame into said shared-communications

- channel wherein said second frame comprises:
- (i) a second basic service set identifier:
- (ii) said second internet protocol address; and
- (iii) a second frame body wherein said second frame body comprises said first frame body and said tag.

Applicants respectfully submit that the rejection to claim 11 has been rendered moot through amendment. Applicants have amended Claim 11 to incorporate elements of Claim 12 in particular "...tagging said first frame with a tag that is representative of said first basic service set identifier ..." and further amended to recite "...tagging said first frame body...." Applicants respectfully submit that independent claim 11, as amended, is allowable for at least the reason that Frodigh et al. fails to disclose, teach, or suggest at least the above-emphasized features of claim 11. Even if, arguendo, Frodigh et al. discloses a first and a second basic service set identifier and a first and a second internet protocol address, Frodigh et al. does not disclose tagging a frame body. Furthermore, Applicants respectfully submit that the addition of Chen fails to cure this deficiency.

For a proper rejection of the claim under 35 U.S.C. §103, the cited combination of references must disclose, teach or suggest all elements / features of the claim at

Art Unit: 2616

issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and In re Keller, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 11, the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 11 is allowable for the reasons discussed above, Applicants respectfully submit that dependent claims 16-17 are allowable as a matter of law. Therefore, Applicants respectfully request that the rejection of claims 16-17 be withdrawn.

Independent Claim 18

Amended Claim 18 recites (with emphasis added):

- 18. An apparatus comprising:
 - a receiver for receiving a first frame from a shared-communications
 - channel wherein said first frame comprises:
 - (i) a first basic service set identifier;
 - (ii) a first internet protocol address; and
 - (iii) a first frame body;

a first processor for passing said first frame through a basic service set identifier filter and tagging said first frame body with a tag that is representative of said first basic service set identifier:

a second processor for translating said first internet protocol

- address to a second internet protocol address; and
- a transmitter for transmitting a second frame into said sharedcommunications channel wherein said second frame comprises:
 - (i) a second basic service set identifier; and
 - (ii) said second internet protocol address; and
 - (iii) a second frame body wherein said second frame

body comprises said first frame body and said tag.

Applicants respectfully submit that the rejection to claim 18 has been rendered moot through amendment. Applicants have amended Claim 18 to incorporate elements of Claim 19 in particular "...tagging said first frame with a tag that is representative of said first basic service set identifier..." and further amended to recite "...tagging said first frame body...." Applicants respectfully submit that independent claim 18, as amended,

Art Unit: 2616

is allowable for at least the reason that Frodigh et al. fails to disclose, teach, or suggest

at least the above-emphasized features of claim 18. Even if, arguendo, Frodigh at al.

discloses a first and a second basic service set identifier and a first and a second

internet protocol address, Frodigh et al. does not disclose tagging a frame body.

Furthermore, Applicants respectfully submit that the addition of Chen fails to cure this

deficiency.

For a proper rejection of the claim under 35 U.S.C. §103, the cited combination

of references must disclose, teach or suggest all elements / features of the claim at

issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and In

re Keller, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the

elements of claim 18, the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 18 is allowable for the reasons

discussed above, Applicants respectfully submit that dependent claims 23-24 are allowable

as a matter of law. Therefore, Applicants respectfully request that the rejection of claims 23- $\,$

24 be withdrawn.

Rejection of claims 12-19 pertaining to Frodigh et al., Chen, and Rune

Dependent Claims 12 and 19

Applicants have incorporated elements of dependent claims 12 and 19 into

independent claims 11 and 18, respectively, and have canceled dependent claims 12 and

19 without prejudice, waiver, or disclaimer. Applicants respectfully submit that claims 11

and 18 as amended, respectively, are novel and unobvious over the combination of Frodigh

et al. in view of Chen and in further view of Rune.

The Office Action (page 8) states (with emphasis added):

...the combination of Frodigh et al and Chen disclose the claimed invention but do not specifically disclose tagging said first frame with a tag that representative [sic] of the first basic service set identifier after the passing.

In the same field of endeavor Rune teaches adding a tag to the frame header based on basic service set identifier (MAC address)(paragraphs (0015)-[00221).

Claims 11 and 18 as amended explicitly require that a tag is added to a frame body. Rune, however, does not teach adding a tag to a frame body, but, rather, appears to teach only adding a "tag header" to the "regular Ethemet frame header" of an Ethemet frame. Even if, arguendo, Rune discloses adding a VLAN tag to a frame based upon a basic service set identifier, Rune only discloses adding a tag to the frame's header, not specifically to its body.

Therefore, since Applicants have cancelled claims 12 and 19, Applicants respectfully submit that the rejections to claims 12 and 19 have been rendered moot.

Rejection of claims 13-14, 20-21 pertaining to Frodigh et al., Chen. and Cromer Dependent Claims 13 and 14

Dependent claims 13 and 14 depend from claim 11. For reasons similar to those presented with respect to claim 11, Applicants respectfully submit that claims 13 and 14 are allowable over *Frodigh et al.* and *Chen*. Furthermore, the addition of *Cromer* to the combination of *Frodigh et al.* and *Chen* fails to cure the deficiency of *Frodigh et al.* and *Chen*. Therefore, for at least the reason that claims 13 and 14, depend from claim 11, claims 13 and 14 are allowable over *Frodigh et al.* in view of *Chen* and in further view of *Cromer*, as a matter of law, and that the rejections to claims 13 and 14 should be withdrawn.

Art Unit: 2616

Dependent Claims 20 and 21

withdrawn.

Dependent claims 20 and 21 depend from claim 18. For reasons similar to those presented with respect to claim 18, Applicants respectfully submit that claims 20 and 21 are allowable over Frodigh et al. and Chen. Furthermore, the addition of Cromer to the combination of Frodigh et al. and Chen fails to cure the deficiency of Frodigh et al. and Chen. Therefore, for at least the reason that claims 20 and 21, depend from claim 18, claims 20 and 21 are allowable over Frodigh et al. in view of Chen and in further in view of Cromer, as a matter of law, and that the rejections to claims 20 and 21 should be

III. Alleged Inherency in the Office Action

According to well-established Federal case law, "[A]nticipation by inherent disclosure is appropriate only when the reference discloses prior art that must necessarily include the unstated limitation." *Atofina v. Great Lakes Chemical Corp.*, 441 F.3d 991, 1000 (Fed. Cir. 2006). Thus, Applicants respectfully traverse the allegations of inherency in the Office Action, as discussed below.

On page 3 of the Office Action, inherency is alleged with regard to claims 1 and 6. The Office Action alleges "....Cromer et al clearly show and disclose a receiver (AP 48) receiving a first frame from a shared-communications channel (with access to the Internet, figure 2 and paragraph [0006], which inherently teaches the use of internet protocol addresses)...." Applicants respectfully disagree. Applicants respectfully submit that receiving a frame from a shared communications channel does not necessarily teach the use of internet protocol addresses. For instance, it is possible that in one implementation the receiver acts as a gateway which could implement an alternative standard addressing scheme or even a proprietary addressing scheme. For instance, the addressing scheme could be IPX in a connectionless network, or ATM in a

Δrt I Init: 2616

connection-oriented network, neither of which necessarily use internet protocol addressing. The receiver could receive an address formatted for one address scheme and translate it into an internet protocol address for transmission into a network connected to the Internet.

On page 6 of the Office Action, inherency is alleged with regard to claims 11 and 18. The Office Action alleges "...figure 1 shows a notebook computer, a processor, forming an infrastructure connection with an access point, inherently teaching the use of a first basic service set identifier...." Applicants respectfully disagree. Applicants respectfully submit that forming a connection with an access point, as allegedly illustrated in Figure 1, does not necessarily teach the use of a first basic service set identifier. Consider that the connection with the access point allegedly illustrated in Figure 1 is established using HiperLAN/2. HiperLAN/2 does not implement a basic service set identifier or an equivalent MAC layer.

On page 6 of the Office Action, inherency is alleged with regard to claims 11 and 18. The Office Action alleges "...figure 1, further shows a user retrieving e-mail to a notebook computer, inherently teaching a first internet protocol address...." Applicants respectfully disagree. Applicants respectfully submit that forming a connection with an access point, as allegedly illustrated in Figure 1, does not necessarily teach the use of a first internet protocol address. Consider that the connection with the access point allegedly illustrated in Figure 1 is established using HiperLAN/2. HiperLAN/2 does not necessarily require the use of internet protocol address. For instance, a HiperLAN/2 frame could carry an ATM frame within its convergence layer that does not use internet protocol addressing.

On page 6 of the Office Action, inherency is alleged with regard to claims 11 and 18. The Office Action alleges "...figure 1 shows a PDA forming an ad hoc connection with a notebook computer, inherently teaching a second basic service set identifier...."

Art I Init: 2616

Applicants respectfully disagree. Applicants respectfully submit that forming a connection with an access point, as allegedly illustrated in Figure 1, does not necessarily

teach the use of a second basic service set identifier. Consider that the connection with

the access point allegedly illustrated in Figure 1 is established using HiperLAN/2.

HiperLAN/2 does not implement a basic service set identifier or an equivalent MAC

layer.

On page 6 of the Office Action, inherency is alleged with regard to claims 11 and

18. The Office Action alleges "...figure 1 further shows a user replying to e-mail via the

PDA, inherently teaching the use of a second internet protocol address...." Applicants

respectfully disagree. Applicants respectfully submit that forming a connection with an

access point, as allegedly illustrated in Figure 1, does not necessarily teach the use of a first

internet protocol address. Consider that the connection with the access point allegedly

illustrated in Figure 1 is established using HiperLAN/2. HiperLAN/2 does not necessarily

require the use of internet protocol address. For instance, a HiperLAN/2 frame could carry

an ATM frame within its convergence layer that does not use internet protocol addressing.

IV. Canceled Claims

As identified above, claims 2, 7, 12, 15, 19 and 22 have been canceled from the

application through this Response without prejudice, waiver, or disclaimer. Applicants

reserve the right to present these canceled claims, or variants thereof, in continuing

applications to be filed subsequently.

Art Unit: 2616

CONCLUSION

Applicants respectfully submit that Applicants' pending claims are in condition for

allowance. Any other statements in the Office Action that are not explicitly addressed

herein are not intended to be admitted. In addition, any and all findings of inherency are

traversed as not having been shown to be necessarily present. Furthermore, any and all

 $findings\ of\ well-known\ art\ and\ official\ notice,\ and\ similarly\ interpreted\ statements,\ should$

not be considered well known since the Office Action does not include specific factual

findings predicated on sound technical and scientific reasoning to support such

conclusions. Favorable re-consideration and allowance of the present application and

all pending claims are hereby courteously requested. Favorable re-consideration and allowance of the present application and all pending claims are hereby courteously

requested. If, in the opinion of the Examiner, a telephonic conference would expedite

the examination of this matter, the Examiner is invited to call the undersigned attorney at

(770) 933-9500.

Respectfully submitted,

/dr/

David Rodack Registration No. 47,034

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P. Suite 1500

600 Galleria Parkway Atlanta, Georgia 30339 (770) 933-9500